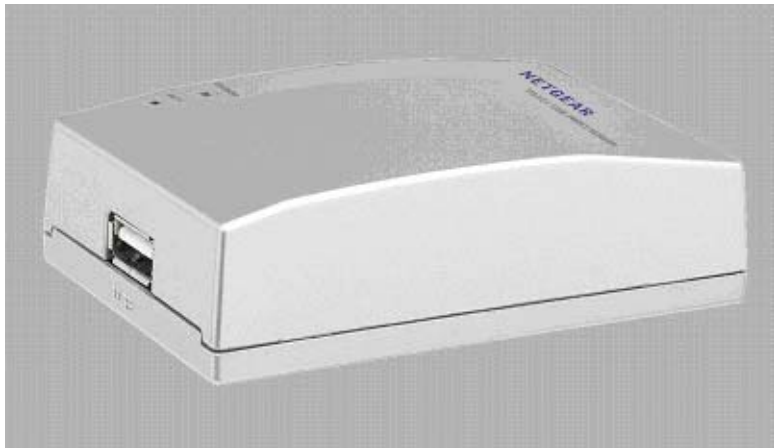


NETGEAR USB Multifunction Printer Server PS121v2 User Manual



NETGEAR®

NETGEAR, Inc.
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202-10211-01
September 2006

Technical Support

Please refer to the support information card that shipped with your product. By registering your product at www.netgear.com/register, we can provide you with faster expert technical support and timely notices of product and software upgrades.

NETGEAR, INC. Support Information

Phone: 1-888-NETGEAR, for US & Canada only. For other countries, see your Support information card.

E-mail: support@netgear.com

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September 2006

Certificate of the Manufacturer/Importer

It is hereby certified that the PS121v2 USB Multifunction Print Server has been suppressed in accordance with the conditions set out in the BMPT- AmtsblVfg 243/1991 and Vfg 46/1992. The operation of some equipment (for example, test transmitters) in accordance with the regulations may, however, be subject to certain restrictions. Please refer to the notes in the operating instructions.

Federal Office for Telecommunications Approvals has been notified of the placing of this equipment on the market and has been granted the right to test the series for compliance with the regulations.

EN 55 022 Declaration of Conformance

This is to certify that the PS121v2 USB Multifunction Print Server is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN 55 022

Class B (CISPR 22).

Bestätigung des Herstellers/Importeurs

Es wird hiermit bestätigt, daß das PS121v2 USB Multifunction Print Server gemäß der im BMPT-AmtsblVfg 243/1991 und Vfg 46/1992 aufgeführten Bestimmungen entstört ist. Das vorschriftsmäßige Betreiben einiger Geräte (z.B. Testsender) kann jedoch gewissen Beschränkungen unterliegen. Lesen Sie dazu bitte die Anmerkungen in der Betriebsanleitung.

Das Bundesamt für Zulassungen in der Telekommunikation wurde davon unterrichtet, daß dieses Gerät auf den Markt gebracht wurde und es ist berechtigt, die Serie auf die Erfüllung der Vorschriften hin zu überprüfen.

Certificate of the Manufacturer/Importer

It is hereby certified that the PS121v2 USB Multifunction Print Server has been suppressed in accordance with the conditions set out in the BMPT-AmtsblVfg 243/1991 and Vfg 46/1992. The operation of some equipment (for example, test transmitters) in accordance with the regulations may, however, be subject to certain restrictions. Please refer to the notes in the operating instructions.

Federal Office for Telecommunications Approvals has been notified of the placing of this equipment on the market and has been granted the right to test the series for compliance with the regulations.

Compliance with the applicable regulations is dependent upon the use of shielded cables. It is the responsibility of the user to procure the appropriate cables.

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About This Manual

This manual describes how to install, configure and troubleshoot the PS121v2 USB Multifunction Print Server. The information in this manual is intended for readers with intermediate computer and Internet skills.

Conventions, Formats and Scope


The conventions, formats, and scope of this manual are described in the following paragraphs:


- **Typographical Conventions.** This manual uses the following typographical conventions::


<i>Italics</i>	Emphasis, books, CDs, URL names
Bold	User input
Fixed	Screen text, file and server names, extensions, commands, IP addresses

- **Formats.** This manual uses the following formats to highlight special messages::

	Note: This format is used to highlight information of importance or special interest.
--	--

	Tip: This format is used to highlight a procedure that will save time or resources.
---	--

	Warning: Ignoring this type of note may result in a malfunction or damage to the equipment.
---	--

	Danger: This is a safety warning. Failure to take heed of this notice may result in personal injury or death.
---	--

- **Scope.** This manual is written for the USB Multifunction Print Server according to these specifications:

Product Version	PS121v2 USB Multifunction Print Server
Manual Publication Date	September 2006






For more information about network, Internet, firewall, and VPN technologies, see the links to the NETGEAR website in [Appendix B, “Related Documents”](#).



Note: Product updates are available on the NETGEAR, Inc. website at <http://kbserver.netgear.com/products/PS121v2.asp>.

How to Use This Manual

The HTML version of this manual includes the following:

- Buttons,  and , for browsing forwards or backwards through the manual one page at a time
- A  button that displays the table of contents and an  button. Double-click on a link in the table of contents or index to navigate directly to where the topic is described in the manual.
- A  button to access the full NETGEAR, Inc. online knowledge base for the product model.
- Links to PDF versions of the full manual and individual chapters.

How to Print this Manual

To print this manual you can choose one of the following several options, according to your needs.

- **Printing a Page in the HTML View.**

Each page in the HTML version of the manual is dedicated to a major topic. Use the *Print* button on the browser toolbar to print the page contents.

- **Printing a Chapter.**

Use the *PDF of This Chapter* link at the top left of any page.

- Click the *PDF of This Chapter* link at the top right of any page in the chapter you want to print. The PDF version of the chapter you were viewing opens in a browser window.
- Your computer must have the free Adobe Acrobat reader installed in order to view and print PDF files. The Acrobat reader is available on the Adobe Web site at <http://www.adobe.com>.
- Click the print icon in the upper left of the window.



Tip: If your printer supports printing two pages on a single sheet of paper, you can save paper and printer ink by selecting this feature.

- **Printing the Full Manual.**

Use the *Complete PDF Manual* link at the top left of any page.

- Click the Complete PDF Manual link at the top left of any page in the manual. The PDF version of the complete manual opens in a browser window.
- Click the print icon in the upper left of the window.



Tip: If your printer supports printing two pages on a single sheet of paper, you can save paper and printer ink by selecting this feature.

Chapter 1

Introduction

Congratulations on your purchase of the NETGEAR® USB Multifunction Print Server. NETGEAR Print Servers are fast and easy to set up with NETGEAR Print Server configuration software. The print server allows you to share a printer without sharing your PC.

This manual describes in detail how to use the multi-function printer reservation feature, how to reconfigure and troubleshoot the PS121v2 USB Multifunction Print Server and provides you with further reference information.

This chapter introduces the features, package contents, and appearance of the PS121v2 USB Multifunction Print Server.

For quick installation and setup, please see the Installation Guide, which describes the installation and use of the PS121v2 for operation with a Microsoft® Windows® XP, Windows® 2000, Windows® Me, or Windows® 98SE 2nd edition system.

Key Features

The key features of the USB Multifunction Print Server are:

- **Versatility.** The USB Multifunction Print Server supports MFP functions such as print, scan copy, fax, and storage operations using the supported operating systems.
- **Easy Installation and Configuration.** The NETGEAR Print Server software that assures fast and easy setup for Windows 98SE, Windows Me, Windows 2000, and Windows XP. The software makes it simple to add PCs to the network that can use the printer connected to the print server.
- **Extremely compact size.** This allows the print server to be used even where space is extremely limited.
- **Ethernet Port.** 10/100 BASE-T standard Ethernet capable to connect any 10/100 Mbps hub and switch.
- **USB 2.0 port.** The PS121v2 USB Multifunction Print Server has one 480 Mbps USB 2.0 port for connecting to the printer.

- **Reserve Multi-Function Printer (MFP) Capability.** You can temporarily reserve the printer for exclusive use by one PC when operating a multi-function printer in a non-print mode such as scanning.
- **Firmware Upgradeable.** Upgradeable flash memory



Note: Product updates are available on the NETGEAR, Inc. web site at <http://kbserver.netgear.com/products/PS121.asp>.

For a list of USB printers that have been tested with NETGEAR print servers, see the Support section of the NETGEAR Web site.



Note: Other USB printers may also be compatible, or partially compatible, but NETGEAR has not tested them.

What's in the Box?

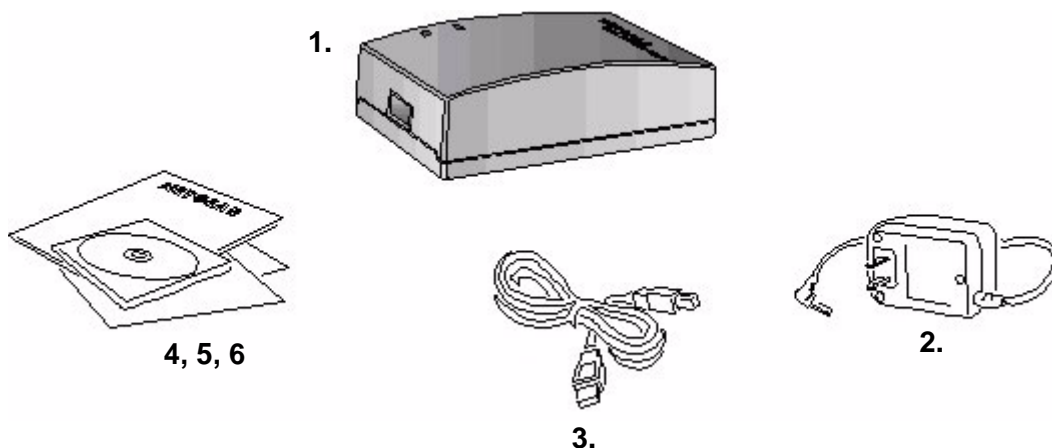


Figure 1-1

The product package should contain the following items:

1. USB Multifunction Print Server
2. Power adapter

3. USB cable
4. *Resource CD*, including:
 - Driver and System Utility Software
 - NETGEAR USB MultiFunction Printer Server PS121v2 Installation Guide
5. Warranty & Registration card
6. Support information card

If any of the parts are incorrect, missing, or damaged, contact your NETGEAR dealer. Keep the carton, including the original packing materials, in case you need to return the product for repair.

To qualify for product updates and product warranty registrations, fill out the registration information within 30 days of purchase. For priority service, register online on the NETGEAR Web page at: <http://www.NETGEAR.com>

You can also fill out and return the Warranty & Registration Card that is included in your product package.

Hardware Description

The PS121v2 USB Multifunction Print Server LEDs indicate the status of the server and the Ethernet traffic. It has one 10/100 Mbps network port. The port operates in 10/100 Mbps when connected to a 10/100Mbps Ethernet network. It has one USB port. It has a power adapter receptacle that accepts a 12V 1A DC power adapter. It has a diagnostic/reset button.

Status Indicators

As illustrated in the figure below, the USB Multifunction Print Server has 2 LEDs.

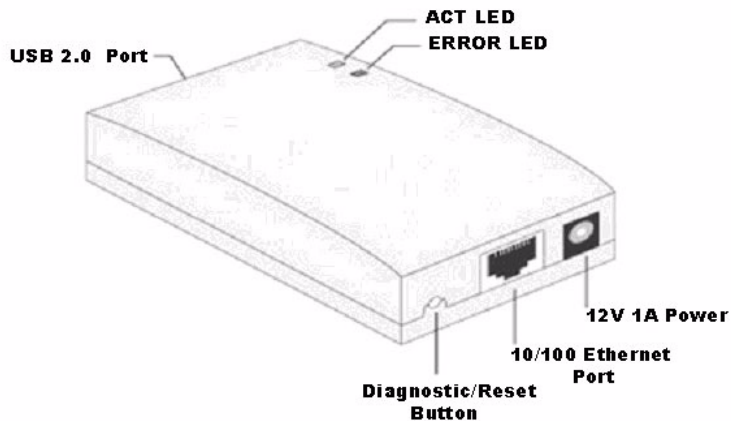


Figure 1-2

See the table below for a description of the LED indicator lights:

Table 1-1. LED Descriptions

ACT Status LED (Green)	ERROR LED (Red)	Description
Off	Off	No power
On	Off	Power on, idle normal operation
Flashing	Off	Normal operation transmitting or receiving data from the network.
On	On	No USB printer attached.
Flashing	Flashing	(LEDs flash in turn) Firmware upgrade in progress

The USB Port

The USB port of the PS121v2 USB Multifunction Print Server is a standard USB connector.



Figure 1-3



Note: The Model PS121 Mini Print Server does not support printers using parallel connectors. If your printer uses a parallel connector, you should use one of the other NETGEAR Print Servers such as the Model PS101 Mini Print Server.

Diagnostic/Reset Push Button

This button has 2 functions:

- Restore the factory default settings
- Print a test page containing all current settings



Recessed Diagnostic/Reset Button

Figure 1-4

The button is recessed. Use a pin or paper clip to press it.

How to Restore the Factory Default Settings

1. Unplug the Print Server from its power source.
2. Press and hold the diagnostic button. While pressing the button, apply power to the Print Server and continue pressing the button until the ACT and ERROR LEDs flash alternately.

How to Generate a Diagnostic Printout



Note: PostScript printers are unable to print this page. If you have a PostScript printer, the test page will not be printed.

1. Ensure that both the Print Server and the attached printer are on.
2. Press the diagnostic button, and hold it in until the ERROR LED flashes slowly.
3. The test page, containing the current settings, will print.

Chapter 2

Setup

This chapter describes how to install your PS121v2 USB Multifunction Print Server and set up basic connectivity on your Local Area Network (LAN).

Verify Printer and Network Readiness

Assure that the following are available:

- You have a working Ethernet network running TCP/IP with at least one Windows 98SE, Me, 2000, or XP PC.
- You have a printer with a USB port.



Note: The PS121v2 USB Multifunction Print Server does not support printers using parallel connectors. If your printer uses a parallel connector, you should use one of the other NETGEAR Print Servers such as the Model PS101 Mini Print Server.

- You may also need to have your printer driver software handy. For most popular printers, Windows already has the printer driver software available.



Tip: Directly connect the printer you will use to a computer and verify that it is working properly before connecting it to the USB Multifunction Print Server

Observe these Precautions

For your own safety, and to protect your Print Server, please observe the following precautions.

- Use only the correct 12V 1A power adapter. Do not pinch, crimp or otherwise damage the power cord. If exposed to foot traffic, ensure that the cable is properly shielded and does not pose a tripping hazard.

- Unplug the print server from its power source before cleaning. Use only a slightly dampened cloth for cleaning. Do not use liquid or aerosol cleaners.
- Avoid using this product near water. Exposure to water poses an electric-shock hazard.

Overview of USB Multifunction Print Server Setup

Before you share a printer with the NETGEAR PS121v2 USB Multifunction Print Server, you should have at least one computer connected to an Ethernet network and have one unused port on a router. When installation is complete, your network configuration will look similar to the following:

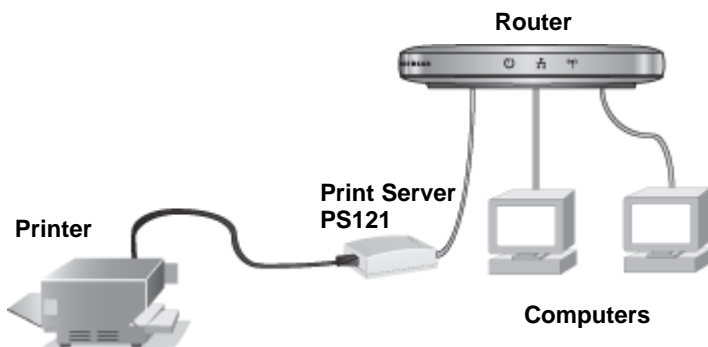


Figure 2-1

PS121v2 Default Factory Settings

When you first receive your PS121v2, the default factory settings are shown below. You can restore these defaults with the Factory Default Restore button on the rear panel as explained in [“How to Restore the Factory Default Settings” on page 1-6](#).

Network Setting	Default Factory Setting
IP Address	Provided Automatically via DHCP for Initial Setup but Must Be Set to Static IP for Regular Operation

Before you begin, gather your existing network settings such as the TCP/IP addresses and networking protocols in use.

Install and Configure the PS121v2 Software

The installation process depends on the type of functionality you want from the PS121v2 USB Multifunction Print Server and your network configuration.

Choose How Your Print Server Will Function

Your print server can be set up to interface with the printer as a multi-function printer or as a standard print-only printer. The choice you make here will affect the way that the print server functions:

- If you choose the multi-function printer capability, then before you can send a job to the printer that requires manual intervention, such as scanning, copying, or faxing, you must reserve the printer for exclusive use by your computer and then, after you have finished with the printer, release the printer so that it becomes available to other computers in your network. For printing operations, the PS121v2 USB Multifunction Print Server will work as a standard network print server: print jobs can be sent concurrently from different computers on your network. This option is only available if *all* the computers in your network are running Windows XP or Windows 2000.
- If you choose the print-only printer capability, the printer will act like a standard network print server: print jobs can be sent concurrently from different computers on your network. This option is available for computer networks that include Macintosh computers and computers running Windows 98 SE and Windows ME, in addition to computers running Windows XP and Windows 2000 using LPR or raw printing.

Setting Up the Print Server to Interface with a Multi-Function Printer

Use the installation instructions on the *Resource CD* to install and set up your print server.



Note: The multi-function feature is only available if all the computers in your network run Windows XP or Windows 2000. However, the Resource CD can be used to install the PS121v2 as a standard print-only print server on Windows 98SE and Windows ME.

Initial Installation

1. Power on your computer, let the operating system boot up completely, and log in as needed.
2. Insert the *Resource CD* for the PS121v2 into your CD-ROM drive. The CD main page will load.

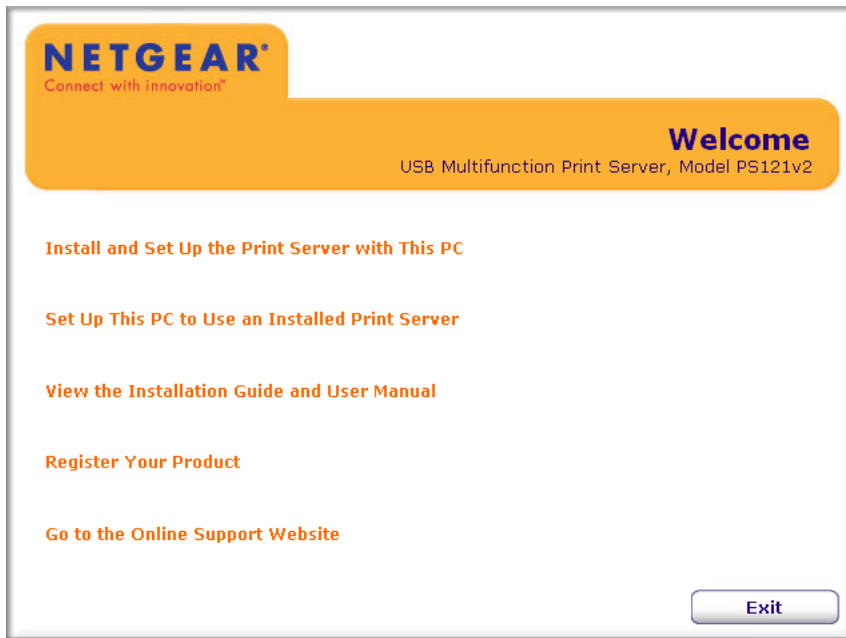


Figure 2-2

3. Click **Install and Set Up the Print Server with This PC** to start the installation wizard.

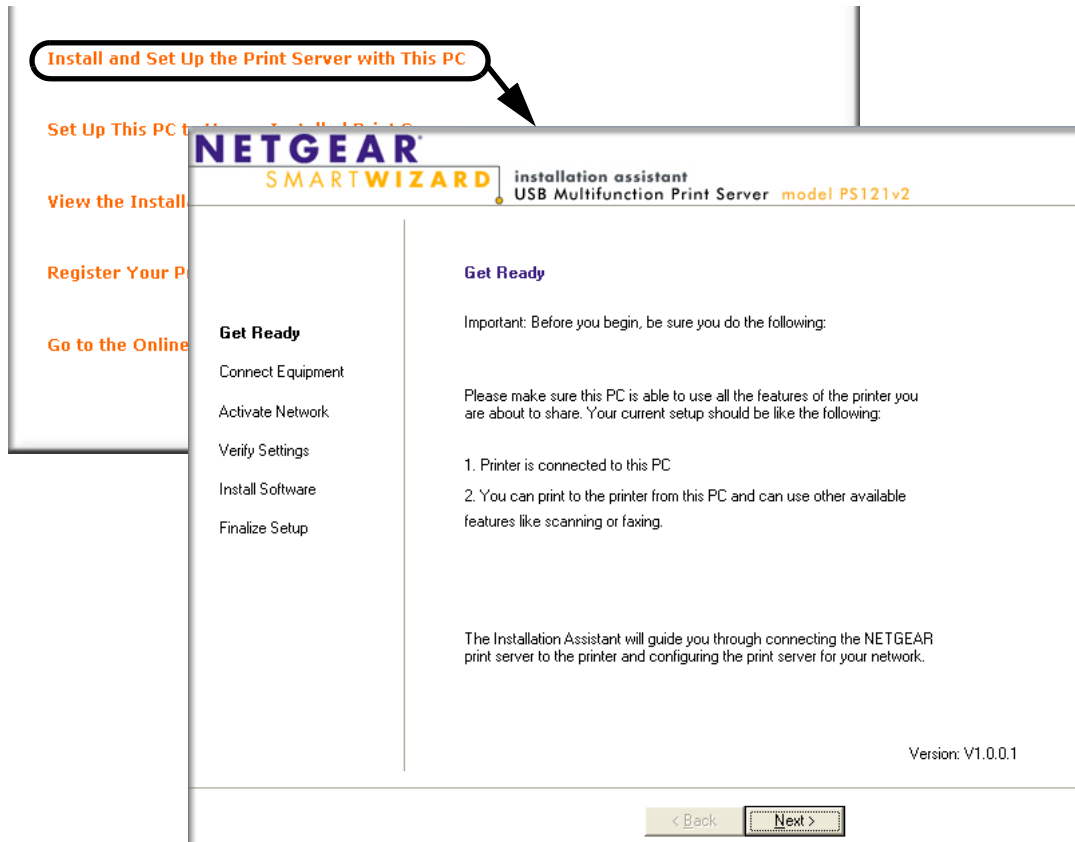


Figure 2-3

4. Simply follow the installation instructions to connect your PS121v2 print server into your network. At the end of the “Connect Equipment” stage, it will search your network for the PS121v2 print server and will notify you accordingly. If the installation assistant cannot find your print server, check the network connections and the print server’s status LEDs.

- Click **Next** to proceed to the “Activate Network” stage, where the IP address settings and device name will be displayed.

NETGEAR
SMARTWIZARD installation assistant
USB Multifunction Print Server model PS121v2

Assign an IP address to Your Print Server

Get Ready
Connect Equipment
Activate Network
Verify Settings
Install Software
Finalize Setup

IP Address: 192 . 168 . 1 . 103
Subnet Mask: 255 . 255 . 255 . 0
Default Gateway: 192 . 168 . 1 . 1
Device Name: PS123588

Recommendation: Please reserve the selected IP address in your router settings if possible. Refer to your router manual on how to reserve an IP address.

Note: This print server provides a security feature. If you want to change IP Address and Device Name, then you are required to pass the authentication first. The default login for administrator is:

User Name: **admin**
Password: **password**


< Back Next >

Figure 2-4

The settings recommended by the installation assistant will usually work well.

	<p>Note: Take a note of the the IP address assigned to the print server. You will need reserve this address in your router to be permanently assigned to the print server, and use it to access the Web-based Graphical User Interface.</p>
--	--

- Click **Next** to continue. If the installation assistant prompts you for a password, type **password** in the password field and click **OK** to continue to the “Verify Settings” stage.
- If the installation instructions prompt you for a password, type **password** and continue.
- When you reach the “Finalize Setup” stage, click **Print Test Page** to confirm that the installation of the **print server** was successful.
- Click **Next** and **Finish** to close the installation assistant.

10. Check that the icon  for the Smart Wizard is installed in the Windows system tray. If it is not, run the SmartWizard program in the ps121 program group to place it there.

Reserve the Print Server's IP Address on Your Router

The DHCP server on your router assigns new IP addresses to its client devices periodically. The print server's IP address should be reserved so that it will never change. Otherwise, if another client requests a new IP address before the print server connects to the router, the print server's IP address will be assigned to the other client, resulting in an IP address conflict.

To reserve the print server's IP address in your router, you will need some or all of the following information about the print server:

- IP address
- MAC address
- Device name

The device name and MAC address is printed on the label on the underside of the device. The above information can also be obtained by running the SmartWizard program or Web GUI.

If you have a NETGEAR router, use the following instructions to reserve the IP address for the print server in your router. Otherwise, refer to your router manual.

To permanently reserve the print server' IP address in a NETGEAR router:

1. Open your web browser and enter the URL <http://www.routerlogin.net> in the address bar or enter the router's IP address. This address is printed on the label on the bottom or the back of the router and is typically either <http://192.168.0.1> or <http://192.168.1.1>.
2. In the Advanced section of the main menu, click **LAN IP Setup**.
The Address Reservation table will be displayed at the bottom of the LAN IP Setup window.
3. Click **Add** to open the Address Reservation window.
4. Enter the IP address, MAC address, and device name in the appropriate text boxes and click **Add**.

Set Up Each Additional PC to Use the PS121v2

After you have set up the PS121v2 in your network and connected it to one computer, you need to set up each additional computer to use the PS121v2. You do this by using the *Resource CD* to run the setup according to the steps below.



Warning: For Windows 98SE and Windows ME, print manager software from Epson and from some HP printers can block communications between your PC and the PS121v2. Uninstall such print manager software before proceeding with the Add Printer Port Wizard.

1. Power on your computer, let the operating system boot up completely, and log in as needed.
2. Insert the *Resource CD* for the PS121v2 into your CD-ROM drive. The CD main page will load.

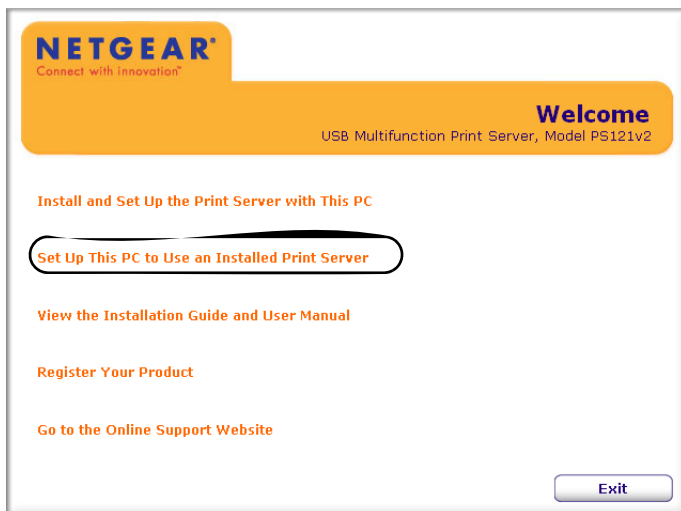


Figure 2-5

3. Click **Set Up the PC to Use an Installed Print Server** to install the SmartWizard, which will allow you to print via the print server.

Your USB Multifunction Print Server is now ready to use. For instructions on using the multifunction feature, refer to [“Reserving a Printer for Exclusive Use by One PC” on page 3-1](#).

Setting Up Your PS121v2 as a Standard Network Print Server

Setting up PCs Running Windows 98SE or Windows ME

Before installing the PS121v2 USB Multifunction Print Server, make sure the driver for the printer you are going to use is already installed on your printer.

Use the *PS121v2 Resource CD* to install the print server, as described in [“Setting Up the Print Server to Interface with a Multi-Function Printer”](#) on page 2-3.



Note: Although the installation procedure is the same as for installing a multi-function printer, the installed PS121v2 USB Multifunction Print Server can only function as a standard print server on Windows 98SE and Window ME platforms.

Setting up PCs Running Windows XP or Windows 2000

If you intend to access the printer using the standard Windows printer driver, install the print server as described in [“Setting Up the Print Server to Interface with a Multi-Function Printer”](#) on page 2-3.

If you intend to use TCP/IP LPR printing follow the installation procedure below.

1. Connect Your Print Server into Your Network Configuration as follows:
 - a. Connect the supplied USB cable (A) from the print server to the printer.

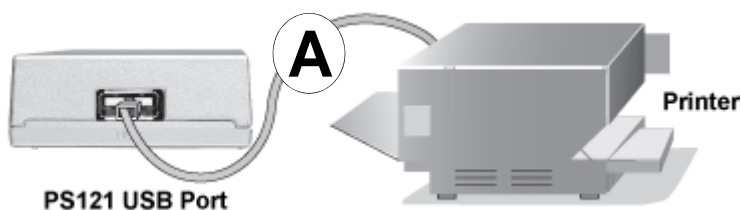


Figure 2-6

- b.** Insert one end (B) of an Ethernet cable into an open Ethernet LAN port in the network device such as a access point or router and insert the other end (C) into the Ethernet port on the PS121v2 print server.

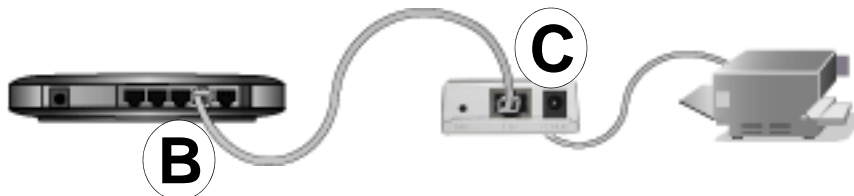


Figure 2-7

- c.** Turn on your printer.
- d.** Connect 12 V power adapter to the print server and plug it into a power source.
- e.** Check the PS121v2 status lights and verify the following:
 - **ERROR light:** When the print server is powered on, the ERROR light will turn red briefly, and then turn off.
 - **ACT light:** When the print server is powered on, it it should turn solid green.
- f.** Verify that your computers are connected to LAN ports on your router, as shown in [Figure 2-1 on page 2-2](#).

2. Run the Windows Add Printer Wizard as follows:

- a. From the Windows Start menu of a computer connected to the PS121v2, click **Printers and Faxes**.
- b. Click **Add a printer** and then **Next** to proceed.



Figure 2-8

- c. Choose the **Local printer attached to this computer** option.

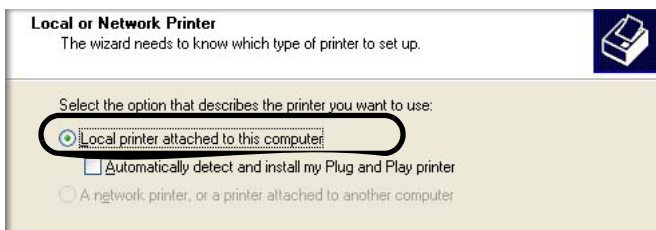


Figure 2-9

- d. Click **Next** to proceed.
- e. On the Select a Printer Port screen, be sure to choose the **Create a new port:** option.

- f. From the “Type of port” drop-down list, select **Standard TCP/IP Port**.

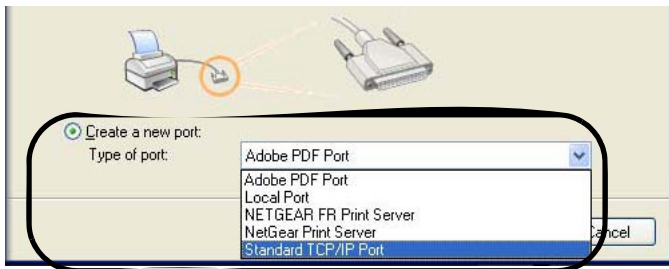


Figure 2-10

- g. Click **Next** to start the Add Standard TCP/IP Printer Port Wizard.



Figure 2-11

3. Complete the Add Standard TCP/IP Printer Port Wizard as follows

- a. Click **Next** to proceed with the Add Standard TCP/IP Printer Port Wizard. The Add Port screen will display.

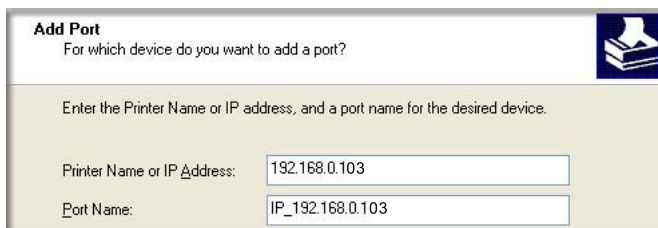


Figure 2-12

- b. From the Add Port screen, enter the IP address of the print server in the IP Address field. Click **Next** to proceed.

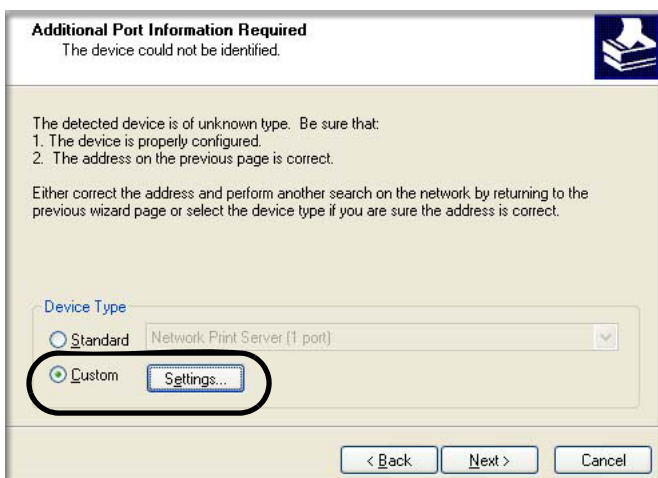


Figure 2-13

- c. In the Device Type section of the Additional Port Information Required screen, select **Custom**, and then click **Settings**.

- d. The Port Settings tab page opens. In the Protocol section, select the **LPR** radio button, and enter **PS121v2** as the Queue Name in the LPR Settings section. Click **OK** to close this tab page.

Port Settings

Port Name: IP_192.168.0.1

Printer Name or IP Address: 192.168.0.1

Protocol

☐ Raw ☒ LPR

Raw Settings

Port Number: 9100

LPR Settings

Queue Name: PS121v2

☐ LPR Byte Counting Enabled

☐ SNMP Status Enabled

Community Name: public

SNMP Device Index: 1

OK Cancel

Figure 2-14

- e. Click **Next** to proceed.
- f. The Add Printer Wizard will now prompt you to install the software for the printer you attached to the PS121v2 USB Multifunction Print Server.

4. Complete the Add Standard TCP/IP Printer Port Wizard as follows:
 - a. From the Install Printer Software screen selection lists, find the manufacturer and model of the printer you connected to the USB port on the print server.

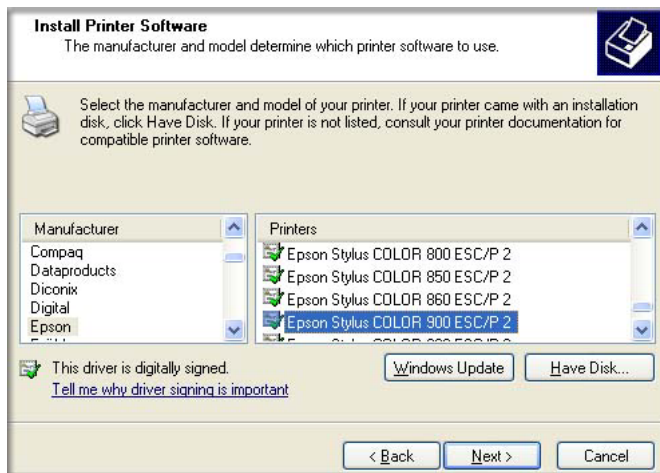


Figure 2-15

If you do not see your make and model of printer in the lists, and you are connected to the Internet, you can click the Windows Update button to download additional printer software from the Microsoft Web site, or you can click the Have Disk button to install the printer software from a disk you have.

- b. Click **Next** to proceed.

If the printer software is already installed on this computer, the Add Printer Wizard will inform you and let you keep the existing driver.

 - c. The Name Your Printer screen prompts for a descriptive name and whether you want it to be the default or not. Enter your choices and then click **Next** to proceed.
 - d. On the Printer Sharing screen, accept the “Do not share this printer” option and click Next to proceed.
5. Print a test page to verify successful printing on your network.
 - a. Upon completion of the Add Printer Wizard, you will be prompted to print a test page.
 - b. Check the printer attached to the USB Multifunction Print Server to verify that the test page printed successfully.

If you are unable to print a test page, see [Chapter 4, “Troubleshooting”](#)

Setting up a Macintosh Computer

Macintosh computers can connect to a TCP/IP network printer using the Line Printer Remote (LPR) protocol. LPR printing can be set up on any Macintosh that has Desktop Printing installed or available. Desktop Printing is supported on MacOS versions beginning from 8.1. LaserWriter8 version 8.5.1 or higher is also required.

To configure the Macintosh to use the print server, follow these steps:

1. From the Apple Extras folder, under Apple LaserWriter Software, launch the Desktop Printing Utility. A new window titled New Desktop Printer appears.
2. Select **LaserWriter 8** in the “With” drop-down menu.
3. Select **Printer (LPR)** and click **OK**. A new window called Untitled 1 will open.
4. If the PostScript Printer Description does not match your printer, click **Change...** and select your actual printer.

If your printer model does not appear, click the **Generic** button.

5. Click **OK** to return to the Untitled 1 window.
6. In the LPR Printer Selection box, click Change...
7. In the Printer Address field, type the IP address of the PS121v2 USB Multifunction Print Server.

You can leave the Queue Name blank.

8. Click **Verify** to make sure your computer can see the printer. You should see the IP address displayed above the button. If no IP Address appears, check that you have correctly typed the queue name or IP Address.
9. Click **OK** to return to the Untitled 1 window.
10. At the bottom of the Untitled 1 dialog box, click **Create....**
11. When prompted, rename the printer with a descriptive name and click **Save**.

A printer icon should now appear on your desktop.

12. Quit the Desktop Printer Utility.

Chapter 3

Operation


This chapter describes the non-printing operations that can be performed on the PS121v2 print server. Those operations are:

- Reserving a multi-function printer for temporary exclusive use by one PC (Windows XP or Windows 2000 only)
- Upgrading the print server firmware and/or SmartWizard from a Windows PC
- Reading the printer port status
- Reading and setting the network parameters
- Change the Web GUI password

Reserving a Printer for Exclusive Use by One PC

You can temporarily reserve the printer for for exclusive use by one PC when operating a multi-function printer in a non-print mode such as scanning, copying, or faxing. This capability is only available to PCs running a Windows XP or Windows 2000 operating system.

To temporarily reserve the print server:

1. Click the SmartWizard icon, , in the Windows system tray. A screen similar to the following will be displayed:

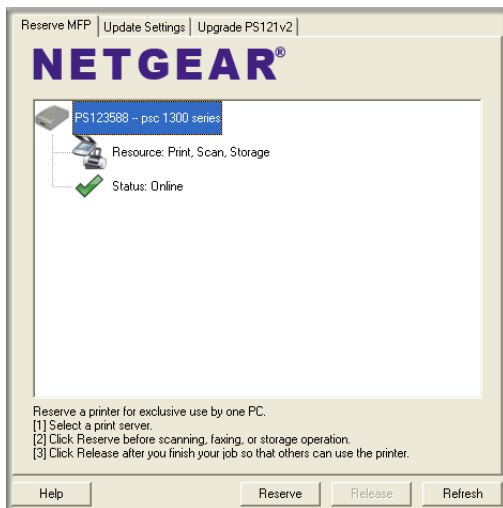


Figure 3-1

2. Click **Reserve**. The status icon will change to a red cross, indicating that the print server is now reserved.

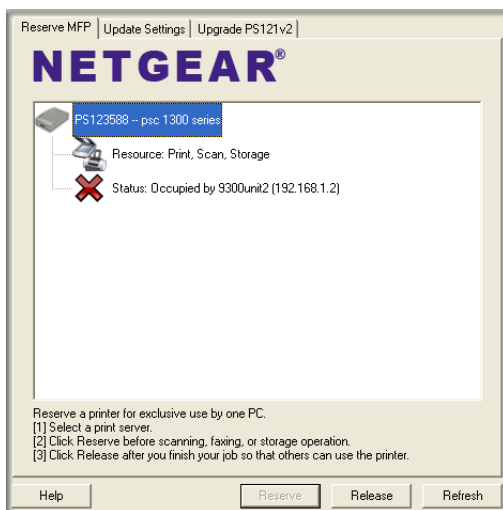


Figure 3-2

Once the print server is reserved, print operations from other computers will be blocked while you perform a non-printing operation such as scanning, copying, or faxing. The print server will automatically become available again to other PCs if you do not use the printer within 5 minutes.

Releasing the Print Server

When you finish the non-printing operation, you can release the print server yourself by clicking the **Release** button in the Reserve MFP window shown in [Figure 3-2](#). The print server will automatically release if it remains idle for 5 minutes. The status icon will change back to the green checkmark shown in [Figure 3-1](#).




Note: If you have more than one PS121v2 print server on your network, your computer's operating system will only be able to connect to the print server selected in the SmartWizard. If you want to connect to another print server, release the print server you reserved and select the device you want from the displayed list.

Upgrading the Print Server Software

The SmartWizard lets you check whether there is an update to the print server firmware or SmartWizard and, if so, lets you upgrade either or both.

To check for updates:

1. Click the SmartWizard icon, , in the Windows system tray and click the **Upgrade PS121v2** tab.

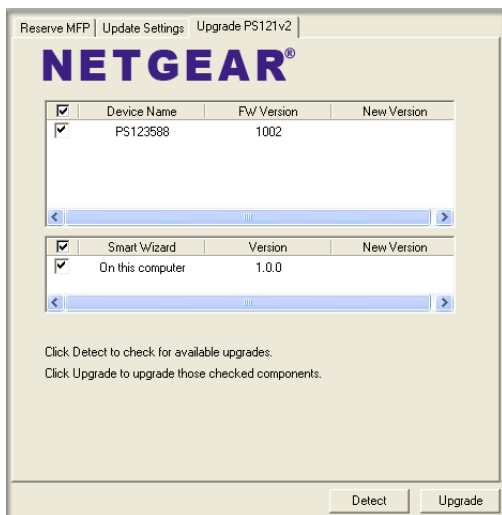


Figure 3-3

2. Select the items you want to detect and click **Detect**. If a new version is available, it will be displayed in the New Version column.

To upgrade the software:

1. Select the items you want to upgrade.
2. If there is an upgrade shown in the New Version column, click **Upgrade**.

Reading the Printer Port Status

To view the port status:

1. Open your Web browser and type in the IP address of the print server in the browser's Address text box.

The browser will display a pop-up window prompting you for the user name and password.



Figure 3-4

2. For the user name, type **admin**. If you have assigned a password enter it in the password box. If you have not changed the password, type the default value of **password**.

The status screen will be displayed as follows:

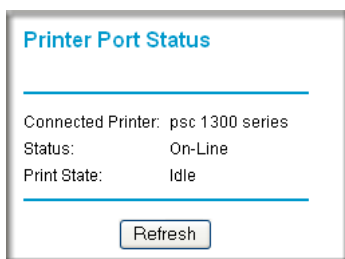


Figure 3-5

The status will indicate On-line, Off-line, or Out of paper.

The print state will show either Idle or Printing.

Reading and Setting the Network Parameters

PCs Running a Windows Operating System

1. Click the SmartWizard icon, , in the Windows system tray and click the **Update Settings** tab.

The device list will display all the PS121v2 print servers in your local network, displaying the device name, its MAC address, IP address, and gateway address.

The screenshot shows the NETGEAR web interface. At the top, there are tabs: "Reserve MFP", "Update Settings", and "Upgrade PS121v2". Below the tabs is the "NETGEAR" logo. A table displays a list of devices with the following columns: "Device Name", "MAC Address", "IP Address", and "Gateway". The first row is highlighted in blue and contains the values: "PS123588", "00:C0:02:0C:23:58", "192.168.1.103", and "192.168.1.1". Below the table is a scroll bar. Underneath the scroll bar is a section titled "New IP Address" with three text boxes for "IP Address" (containing "192 . 168 . 1 . 103"), "Subnet Mask" (containing "255 . 255 . 255 . 0"), and "Gateway" (containing "192 . 168 . 1 . 1"). To the right of the "Subnet Mask" box is a "Suggest" button. Below the "Gateway" box is the text "(optional)". At the bottom of the interface are two buttons: "Apply" and "Refresh".

Device Name	MAC Address	IP Address	Gateway
PS123588	00:C0:02:0C:23:58	192.168.1.103	192.168.1.1

New IP Address

IP Address: 192 . 168 . 1 . 103

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1 (optional)

Suggest

Apply Refresh

Figure 3-6

2. To edit the IP parameters associated with a print server:
 - a. If the device is not highlighted with white text on a blue background, click on the entry to select and highlight it.

The IP parameters will be displayed in the three text boxes in the New IP Address group.
 - b. Edit the IP parameters and click **Apply**.

Non-Windows Computers

To view or edit the IP settings:

1. Open your Web browser and type in the IP address of the print server in the browser's Address text box.

The browser will display a pop-up window prompting you for the user name and password.



Figure 3-7

2. For the user name, type **admin**. If you have assigned a password enter it in the password box. If you have not changed the password, type the default value of **password**.
3. To view the settings, click **Server Status** in the main menu.

The browser will display, the PS121v2 name and firmware version, and its IP settings.

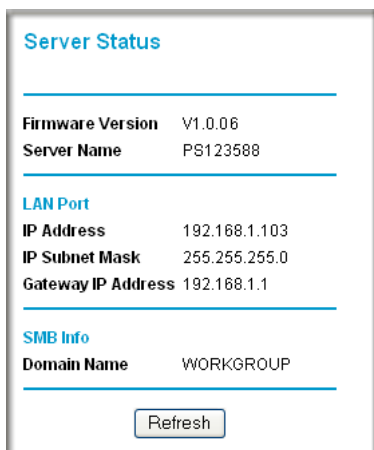


Figure 3-8

4. To edit the IP settings, click **LAN IP Setup** in the main menu.

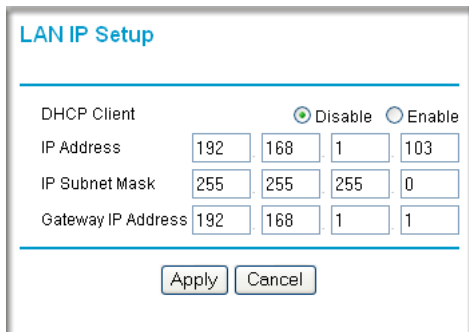


Figure 3-9

5. Edit the IP address, IP subnet mask, and gateway IP address, as desired, and click **Apply**.



Warning: Normally, the DHCP Client field setting should be left in the **Disable** setting so that the IP address of the device remains fixed. It is not recommended that you select **Enable**. If you do, the print server will find an IP address for you automatically from the router or other DHCP server in your network. When the DHCP server changes the IP address, you will be disconnected from the Web GUI and unable to open it again unless you can ascertain the reassigned IP address. Also, the SmartWizard operates under the assumption that the IP address of the print server is fixed.

6. To change the print server name, click **Configure Server** in the main menu, edit the name in the Print Server Name text box, and click **Apply**.



Note: The print server name must not contain any spaces.

Changing the Web GUI Password

If you want to restrict access to the Web GUI, change the password as follows:

1. Open your Web browser and type in the IP address of the print server in the browser's Address text box.

The browser will display a pop-up window prompting you for the user name and password.



Figure 3-10

2. For the user name, type **admin**. If you have previously assigned a password enter it in the password box. If you have not changed the password, type the default value of **password**.
3. Click **Configure Server** in the main menu.

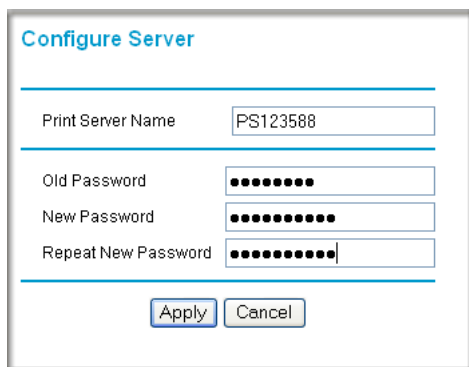


Figure 3-11

4. In the Old Password textbox, type the password you used to log in.

5. Type the new password in both the New Password textbox, and the Repeat New Password text box.
6. Click **Apply** to change the password settings.

Chapter 4

Troubleshooting

This chapter gives information about troubleshooting your PS121v2 USB Multifunction Print Server. After each problem description, instructions are provided to help you diagnose and solve the problem. For the common problems listed, go to the section indicated.

- Is the print server on and is the Status light lit?

Go to [“Basic Functioning” on page 4-1.](#)

- Have I connected the print server correctly?

Go to [“Printing Errors” on page 4-2.](#)

- How can I check the printer’s current status remotely?

Go to [“Checking the Current Status of the Printer” on page 4-3](#)

Basic Functioning



Note: For the most up-to-date PS121v2 installation details and troubleshooting guidance visit www.netgear.com.

If you have trouble setting up your PS121v2, check the tips below.

The print server has no power

- Make sure the power cord is connected to the print server.
- Make sure the power adapter is connected to a functioning power outlet. If it is in a power strip, make sure the power strip is turned on. If it is plugged directly into the wall, verify that it is not a switched outlet.
- Make sure you are using the correct NETGEAR power adapter supplied with your print server.

No lights are lit on the print server

It takes a few seconds for the status light to be lit. Wait a minute and check the status light on the print server.

Printing Errors

The printer is printing "garbage" characters

If the printer does not match the printer driver in the operating system, then run the Add Printer Wizard.

Windows error message appears when printing

Consult Windows help.

The print server is not found

Make sure you can access other places from your computer. If you cannot, then troubleshoot your computer or Internet connectivity.

If you are running a software firewall, disable it. This includes the Windows XP firewall — which may have been turned on during Windows upgrade or installation without you being aware of it.

Nothing is printing

- Try printing from another computer. If this is successful, then there is a problem with your computer configuration, not the print server. Consult the computer and operating system documentation.
- Turn off the print server, then turn it on. Test whether the print server works.
- If the printer does not match the printer driver in the operating system, then set up the print server using the *PS121v2 Resource CD*. See [“Set Up Each Additional PC to Use the PS121v2” on page 2-8](#)
- Disable the printer's bidirectional feature, if it is turned on under Windows 98SE or Windows ME.

Checking the Current Status of the Printer

You can check the current status of the printer remotely from the Web configuration screen. The following conditions are displayed.

- Current status — on-line, off-line, out of paper
- Print State — either Idle or Printing, depending on the state of the printer

You can click the Print Test Page button from within the setup wizard to check that the print server and printer are working.

Appendix A

Technical Specifications

This appendix provides technical specifications for the PS121v2 USB Multifunction Print Server.

Standards Compatibility	IEEE 802.3u, 100BASE-TX, Fast Ethernet IEEE 802.3i 10BASE-T CSMA/CD NetBEUI, and TCP/IP protocols
Data Rate	10/100 Mbps
Interface	10BASE-T/100BASE-TX network port (RJ-45) USB 2.0 port
Power Specifications for the Power Adapter	Input voltage: 100 to 240 V AC, 50 to 60 Hz, according to the power adapter Localized plug: For North America, Japan, UK, Europe, and Australia Output voltage: 12 V DC at 1A
Power Specifications for the Print Server	Power consumption: 12 W maximum Input voltage: 12 V DC at 1 Amp, maximum
Operating Temperature	0 to 40 °C (32 to 104 °F)
Operating Humidity	90% maximum relative humidity, noncondensing
Electromagnetic Emissions Compliance	FCC Part 15, Class B EN 55 022 (CISPR22), Class B EN 55 024 C-Tick N10947

Appendix B

Related Documents

This appendix provides links to reference documents you can use to gain a more complete understanding of the technologies used in your NETGEAR product.

Document	Link
Internet Networking and TCP/IP Addressing	http://documentation.netgear.com/reference/enu/tcpip/index.htm
Preparing a Computer for Network Access	http://documentation.netgear.com/reference/enu/wsdhcp/index.htm
Glossary	http://documentation.netgear.com/reference/enu/glossary/index.htm

